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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,660	12/18/2001	Monika Blumm	A-2958	1769

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09/05/2003

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EXAMINER

CRENSHAW, MARVIN P

ART UNIT

PAPER NUMBER

2854

DATE MAILED: 09/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/022,660

Applicant(s)

BLUMM ET AL.

Examiner

Marvin P. Crenshaw

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on the amendment filed on 6/24/03.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7-9 and 11-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-9 and 11-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 4, 7 - 9 and 11 - 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoyama et al. in view of Murray.

With respect to claim 1 and 15, Yokoyama et al. teaches a cylinder jacket (Fig. 3) profile configuration for a rotary printing press cylinder (Fig. 1) comprising a sheet-guiding cylinder jacket profile having a spherical surface structure (Fig. 3) and an easy-clean microstructure layer (16) as a surface coating for said sheet-guiding jacket profile, said easy-clean layer having a thickness of less than 5  $\mu\text{m}$  (See col. 17, lines 24-30).

However, Yokoyama et al. doesn't teach a surface energy of less than 50 mN/m.

Murray teaches a layer having a surface energy of less than 50 mN/m (See col. 9, lines 30 – 40). It would have been obvious to modify Yokoyama et al. to have the surface energy less than 50 mN/m as taught by Murray et al. so that the ink will not be picked up in the areas that the sheet will not touch.

With respect to claim 2, Yokoyama et al. teaches the thickness of the easy-clean microstructure layer is substantially 1  $\mu\text{m}$  (See col. 13, lines 15-20).

With respect to claim 3, Yokoyama et al. teaches the sheet-guiding cylinder jacket profile includes an anti-wear layer (15), and the easy-clean microstructure layer (16) is disposed on the anti-wear layer.

With respect to claim 4, Yokoyama et al. teaches the anti-wear layer is a chromium layer (See col. 2, line 52-60).

With respect to claim 5, Yokoyama et al. teaches the elevations are elements of irregularly structured elevations (fig. 3).

With respect to claim 6, Yokoyama et al. teaches the sheet-guiding cylinder jacket profile has depressions (Fig. 3) formed therein and the depressions are irregularly shaped (Fig. 3) structured depressions.

With respect to claim 7, Yokoyama et al. teaches easy-clean microstructure layer exhibits a lotus effect (Fig. 3).

With respect to claim 8, Yokoyama et al. teaches the spherical structure has elevations and the easy-clean microstructure layer is interrupted (Fig. 3) on the elevations.

With respect to claim 9, Yokoyama et al. teaches the spherical structure has depressions and the easy-clean microstructure layer is provided only in depressions (Fig. 4).

With respect to claim 11, Yokoyama et al. teaches a method for producing an easy-clean layer on a cylinder jacket profile, the method which comprises providing a cylinder jacket profile having spherical surface structure (Fig. 3) and applying an easy-clean layer (16) as a surface coating for the cylinder jacket profile, the easy-clean layer providing a microstructure to the jacket profile such that the easy-clean layer has a

thickness of less than 5  $\mu\text{m}$  (See col. 17, lines 24-30). However, Yokoyama et al. doesn't teach a surface energy of less than 50 mN/m. Murray teaches a layer having a surface energy of less than 50 mN/m (See col. 9, lines 30 – 40). It would have been obvious to modify Yokoyama et al. to have the surface energy less than 50 mN/m as taught by Murray et al. so that the ink will not be picked up in the areas that the sheet will not touch.

With respect to claim 12, Yokoyama et al. teaches the method that comprises applying the easy-clean layer such that the thickness of the easy-clean layer is substantially 1  $\mu\text{m}$  (See col. 13, lines 15-20).

With respect to claim 13, Yokoyama et al. teaches the method comprising applying the easy-clean layer initially as a substantially uninterrupted layer and subsequently removing the easy-clean layer from the elevations (Fig. 3) of the spherical surface structure.

With respect to claim 14, Yokoyama et al teaches. a method that comprises removing the easy-clean layer by contacting (See col. 3, lines 55-66) the easy-clean layer with a printing sheet during a printing operation.

With respect to claim 16, the printing press cylinder is a sheet-guiding cylinder selected from the group consisting of an impression cylinder and a sheet transfer cylinder configured for a recto/verso printing (See, Col. 1, lines 12 – 29).

With respect to claim 1, 11 and 15, the art of Murray teaches having a surface energy of 14 dynes, this number was converted to mN/m and it was found to be of less value than applicants stated quantity and therefore meets the necessary value.

### ***Response to Arguments***

Applicant's arguments filed June 06, 2003 have been fully considered but they are not persuasive. Specifically, Yokoyama et al. teaches the claimed structure of a profile for a cylindrical jacket of a printing press. With respect to the cylinder jacket having a spherical surface structure, it is inherent that the surface structure of Yokoyama et al. is spherical since the cylinder has an irregular shape that is spherical.

With respect to the microstructure layer, Yokoyama et al. teaches an easy-clean microstructure layer (16) for a surface covering on the cylinder jacket, would be beneficial to allow the ink to be easily cleaned off of the cylinder. The resin layer as claimed by Yokohama is an easy-clean layer because it has a low surface energy, provides a smooth surface and its durability during usage (see for example, col. 17, lines 59 – 62).

With respect to Murray, he teaches the use of PTFE (which is admitted by applicant) as an excellent low-energy surface coating application for allowing the paper to move freely during the printing process.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marvin P. Crenshaw whose telephone number is (703) 308-0797. The examiner can normally be reached on Monday - Friday 7:00-4:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (703) 305-6619. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



MPC

September 3, 2003



ANDREW H. HIRSHFELD  
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